REMARKS

Objections

- 1. The Office Action objected to the specification on the grounds that page 9, lines 8, 12, 13 and 26, referred to features that did not appear in the drawings. In view of the enclosed drawings, the objection is believed overcome.
- 2. The Office Action requested clarification about the different surface areas that appear on Table 4, page 1 and Table 5, page 12. Table 4 shows actual surface area measurement by nitrogen absorption whereas Table 5 shows calculated surface area as determined from equivalent spherical diameter measured by laser diffraction. If further clarification is required, Applicants kindly request that the Examiner advise.
- 3. The Office Action objected to the drawings filed on August 17, 2001, because figures 8, 9, and 10 included characters that were less than 0.32 cm (1/8 inch) in height. The Office Action requested formal drawings. Enclosed are the formal drawings and the objection is believed overcome. Reconsideration is requested.

Rejections Under 35 USC 112, second paragraph

- 1. The Office Action rejected Claims 1-18 and 21-23 under 35 USC 112, second paragraph, on the grounds that the "and/or" phrasing in Claim 1 allegedly rendered the claim vague and indefinite. In view of the modifications above, the objection is believed overcome.
- 2. The Office Action rejected Claim 9 under 35 USC 112, second paragraph, on the grounds that the claim contained an improper Markush group. In view of the modifications above, the objection is believed overcome.

Rejections Under 35 USC 102

Rejection of Claims 1-4, 8-12 and 15 Under 35 USC 102
 The Office Action rejected Claims 1-4, 8-12, and 15 Under 35 USC 102 over
 U.S. Pat. No. 2,516,863 (Gardner). The rejection should be withdrawn.

It is well settled that a 35 USC 102 rejection must rest upon the literal teachings of a reference and that the teachings must disclose every element of the Mo-7303US

- 5 -

claimed invention in as complete detail as is contained in a claim. In order for a prior art reference to anticipate a claim, the reference must disclose each and every element of the claim with sufficient clarity to prove its existence in prior art. The disclosure requirement under 35 USC 102 presupposes knowledge of one skilled in art of the claimed invention, but such presumed knowledge does not grant a license to read into prior art reference teachings that are not there. <u>See Motorola Inc. v. Interdigital Technology Corp.</u> 43 USPQ2d 1481 (1997 CAFC).

Applicants' invention, as encompassed by Claims 1-4, 8-12, and 15, relates to a method that makes a refractory (valve metal) powder or a refractory (valve metal) oxide by a continuous reduction reaction. The method involves the combination of the following steps. The method (i) continuously provides a refractory or valve metal oxide as a continuous feed or segments of continuous feed; (ii) contacts the refractory or valve metal oxide feed with a reducing agent selected from the group consisting of magnesium, aluminum, and calcium, to create a static mixture or a dynamically formed mixture. As Applicants explain in the specification, the use of oxide/reducing agent blend eliminates the problems associated with the transport of gaseous metal to the reaction zone (Specification page 5, paragraph 18). Applicants' method then (iii) reduces the refractory or valve metal oxide feed in a reaction zone by heating the mixture in a reaction vessel to create a highly exothermic selfsustaining reaction, in which the exothermic reaction can be triggered by heating the mixture to an ignition temperature or by adding a further reagent or catalyst. Advantageously, the energy required to make the reaction self-sustaining comes from the chemical reaction released by the reduction reaction (See page 7, paragraph 24). In other words, the method requires conditions that allow the reduction reaction to generate sufficient energy to propagate itself and (iv) recover "a high surface area powder substantially free of impurities."

Gardner discloses a metallurgical process that refines and reduces tantalum and niobium (columbium) from their concentrates (See Column 1, lines 1-5).

Gardner also discloses a metallurgical process that refines and reduces combinations containing tantalum, niobium, or both tantalum and niobium (See Column 1, lines 38-45). In the latter embodiment, Gardner discloses a process for treating combinations or concentrates which contain oxides of both tantalum and Mo-7303US

- 6 -

niobium, treated in powdery form, for the recovery of both of such metals (See Column 1, line 52 to Column 2, line 5. The Gardner process generally involves (i) reducing the tantalum and niobium compounds in a substantially inert atmosphere by reduction with a saline hydride in the presence of a powdery light metal (such as aluminum, magnesium, calcium, lithium, etc., combinable exothermically with oxygen) thereby yielding a mixture of tantalum and niobium in powdery metal form and (ii) separating the two metals from each other (unless it is desired to maintain the combinations of tantalum and niobium (See Column 2, lines 5-19)). When the tantalum and niobium separate, the tantalum and niobium may be separated by (a) dispersing the mixture in a vehicle or bath of molten sodium tetraborate, or (b) subjecting a mixture of the two powdery metals to centrifugal force, or (c) subjecting the mixture of metals to melting and distillation (See Column 2, lines 23-50).

Gardner does not anticipate Applicants' invention. Gardner does not disclose a process that requires a self-sustaining exothermic reaction. Gardner's metallurgical process fails to disclose a process that continuously provides a refractory or valve metal oxide as a continuous feed or segments of continuous feed, and contacts the refractory or valve metal oxide feed with a reducing agent selected from the group consisting of magnesium, aluminum, and calcium, to create a static mixture or a dynamically formed mixture. Although Gardner teaches that its process may be practiced "continuously," Gardner fails to provide any meaningful details that disclose how a refractory or valve metal oxide can be continuously added. Gardner does not teach forming a blend of oxide feed with a reducing agent selected from magnesium, aluminum, and calcium before such a blend is heated under conditions that create a self-sustaining exothermic reaction. Reconsideration is requested.

The Office Action's reliance on Column 3, lines 49-75 does not support the rejection. In fact, this section of Gardner discloses a process that is fundamentally different from Applicants' process. Here, Gardner discloses details of a <u>batch</u> process, in which the reaction starts, proceeds, and comes to completion in the entire load. This reaction is essentially a thermite bomb. The disclosure here fails to provide any self-sustaining reaction. Further, because batch conditions (load size, geometry, and the like) will uncontrollably affect the maximum process temperature, powder physical properties will vary accordingly. In addition, because of the

uncontrolled temperatures, formation of the unwanted aluminum tantalates cannot be avoided. These last two facts limit the powders us to metallurgical grade powder which cannot reasonably be used to generate "a high surface area powder substantially free of impurities," as required by Applicants' process. Reconsideration is requested.

The invention encompassed by Claim 11 is further novel over Gardner, because Gardner does not disclose a process requiring the temperature in the reaction zone be less than or equal to the melting point of the refractory or valve metal oxide feed.

The invention encompassed by Claim 15 is further novel over Gardner, because Gardner does not disclose how to control chemical and physical properties of a powder made by a process requiring a self-sustaining exothermic reaction, as required by Claim 15. Reconsideration is requested.

2. Rejection of Claims 1-4, 6, 8-12, and 15 under 35 USC 102 The Office Action rejected Claims 1-4, 6, 8-12, and 15 Under 35 USC 102 over U.S. Pat. No. 3,658,507 (Gohin). The rejection should be withdrawn.

Gohin discloses a method for the industrial manufacture of chromium powder from chromium oxide powder (See Abstract). The process involves dividing an industrial quantity of chromium oxide powder into masses between 1 and about 10 kilograms, embedding magnesium in ingot form in each of these masses (which are thermally insulated from each other, and heating the industrial quantity in the same enclosure in a single treatment phase (See Column 1, lines 40-48)). The heating of the masses is such as to react the magnesium vapor produced by the magnesium ingots with the chromium oxide powder.

Gohin is <u>fundamentally different</u> from Applicants' method. Gohin's dividing, embedding, and heating steps do not disclose Applicants' method. Gohin does not disclose a method that (i) continuously provides a refractory or valve metal oxide as a continuous feed or segments of continuous feed. Gohin does not disclose a method that also (ii) contacts the refractory or valve metal oxide feed with a reducing agent method then (iii) reduces the refractory or valve metal oxide feed in a reaction zone by heating the mixture in a reaction vessel to create a highly exothermic self-Mo-7303US

- 8 -

sustaining reaction, in which the exothermic reaction can be triggered by heating the mixture to an ignition temperature or by adding a further reagent or catalyst and (iv) recovers "a high surface area powder substantially free of impurities." Reconsideration is requested.

The invention encompassed by Claim 11 is further novel over Gohin, because Gohin does not disclose a process requiring the temperature in the reaction zone be less than or equal to the melting point of the refractory or valve metal oxide feed.

The invention encompassed by Claim 15 is further novel over Gohin, because Gohin does not disclose how to control chemical and physical properties of a powder made by a process requiring a self-sustaining exothermic reaction, as required by Claim 15. Reconsideration is requested.

3. Rejection of Claims 1, 4, 7, 8, 10, 11, 12, 15 and 16 under 35 USC 102
The Office Action rejected Claims 1, 4, 7, 8, 10, 11, 12, 15 and 16 under 35
USC 102 over U.S. Pat. No. 4,045,216 (Meyer).

Meyer discloses a process that involves agglomerating a molybdenum trioxide powdered concentrate into pellets in size employing a suitable binder (See Summary of Invention).

The rejection under Meyer cannot stand. Meyer's process that agglomerates a molybdenum trioxide powdered concentrate into pellets in size employing a suitable binder is fundamentally different from Applicants' invention. Meyer does not disclose a method that (i) continuously provides a refractory or valve metal oxide as a continuous feed or segments of continuous feed. Meyer does not disclose a method that also (ii) contacts the refractory or valve metal oxide feed with a reducing agent method then (iii) reduces the refractory or valve metal oxide feed in a reaction zone by heating the mixture in a reaction vessel to create a highly exothermic self-sustaining reaction, in which the exothermic reaction can be triggered by heating the mixture to an ignition temperature or by adding a further reagent or catalyst and (iv) recovers "a high surface area powder substantially free of impurities." Applicants' request that the U.S. PTO acknowledge the differences that exist between their invention and Meyer and withdraw the rejection. Reconsideration is requested.

The invention encompassed by Claim 11 is further novel over Meyer, because Meyer does not disclose a process requiring the temperature in the reaction zone be less than or equal to the melting point of the refractory or valve metal oxide feed.

The invention encompassed by Claim 15 is further novel over Meyer, because Meyer does not disclose how to control chemical and physical properties of a powder made by a process requiring a self-sustaining exothermic reaction, as required by Claim 15. Reconsideration is requested.

4. Rejection of Claims 1-5, 8, 9, 10, and 15 under 35 USC 102

The Office Action rejected Claims 1-5, 8, 9, 10, and 15 under 35 USC 102 over U.S. Pat. No. 5,769,922 (Higgins). The rejection under Higgins cannot stand.

Higgins discloses a method for producing a vanadium-aluminum-ruthenium master alloy which is substantially homogeneous and free of ruthenium inclusions, which includes the steps of (a) mixing together a powdered charge of vanadium pentoxide, ruthenium and excess aluminum in appropriate proportions to yield the desired final master alloy composition; (b) igniting the powdered charge in the presence of a molten flux, such as lime, fluorspar, or sodium chlorate, to alumino-thermically react the vanadium pentoxide with the excess aluminum in the presence of ruthenium, all contained in the powdered charge, such that the vanadium pentoxide is reduced to molten vanadium metal which alloys with molten aluminum and ruthenium and is formed into a molten vanadium-aluminum-ruthenium master alloy together with molten alumina slag; (c) gravitationally separating the molten vanadium-aluminum-ruthenium alloy from the alumina slag; and, (d) cooling said vanadium-aluminum-ruthenium alloy to a solid ingot.

Higgins vanadium-aluminum-ruthenium master alloy preparation process is fundamentally different from Applicants' invention. Higgins' mixing, igniting, gravitationally separating, and cooling steps do not disclose a method that (i) continuously provides a refractory or valve metal oxide as a continuous feed or segments of continuous feed. Higgins batch process does not disclose a method that also (ii) contacts the refractory or valve metal oxide feed with a reducing agent method then (iii) reduces the refractory or valve metal oxide feed in a reaction zone Mo-7303US

- 10 -

by heating the mixture in a reaction vessel to create a highly exothermic self-sustaining reaction, in which the exothermic reaction can be triggered by heating the mixture to an ignition temperature or by adding a further reagent or catalyst and (iv) recovers "a high surface area powder substantially free of impurities." Applicants' request that the USPTO acknowledge the differences that exist between their invention and Higgins and withdraw the rejection. Reconsideration is requested.

The invention encompassed by Claim 15 is further novel over Higgins, because Higgins does not disclose how to control chemical and physical properties of a powder made by a process requiring a self-sustaining exothermic reaction, as required by Claim 15. Reconsideration is requested.

5. Rejection of Claims 1, 2, 4, 6-12, 15-18 and 21-23 under 35 USC 102
The Office Action rejected Claims 1, 2, 4, 6-12, 15-18 and 21-23 under 35
USC 102 over U.S. Pat. No. 6,136,062 (Loffelholz).

The rejection under Loffelholz cannot stand. Loffelholz discloses a process comprising the reduction of niobium and/or tantalum oxides by means of alkaline earth metals and/or rare earth metals. The first reduction stage is carried out as far as an average composition corresponding to (Nb, Ta)O_x, in which x is 0.5 to 1.5 and before the second stage the reduction product from the first stage is freed from alkaline earth oxides and/or rare earth metal oxides which are formed (and optionally from excess alkaline earth metal and/or rare earth metal) by washing with mineral acids.

Loffelholz' reduction of niobium and/or tantalum oxides by means of alkaline earth metals and/or rare earth metals does not disclose Applicants' method.

Loffelholz first and second stages simply lack the details to place Applicants' invention in the possession of the public. Loffelholz does not disclose a method that (i) continuously provides a refractory or valve metal oxide as a continuous feed or segments of continuous feed. Loffelholz does not disclose a method that also (ii) contacts the refractory or valve metal oxide feed with a reducing agent method then (iii) reduces the refractory or valve metal oxide feed in a reaction zone by heating the mixture in a reaction vessel to create a highly exothermic self-sustaining reaction, in which the exothermic reaction can be triggered by heating the mixture to an ignition

temperature or by adding a further reagent or catalyst and (iv) recovers "a high surface area powder substantially free of impurities." Applicants' request that the U.S. PTO acknowledge the differences that exist between their invention and Loffelholz and withdraw the rejection. Reconsideration is requested.

The invention encompassed by Claim 11 is further novel over Loffelholz, because Loffelholz does not disclose a process requiring the temperature in the reaction zone be less than or equal to the melting point of the refractory or valve metal oxide feed.

The invention encompassed by Claim 15 is further novel over Loffelholz, because Loffelholz does not disclose how to control chemical and physical properties of a powder made by a process requiring a self-sustaining exothermic reaction, as required by Claim 15. Reconsideration is requested.

Rejections Under 35 USC 103

1. Rejection of Claim 7 Under 35 USC 103

The Office Action rejected Claim 7 under 35 USC 103 over Gardner, Gohin, or Higgins. The rejection should be withdrawn in view of the remarks below.

It is well settled that to establish a *prima facie* case of obviousness, the USPTO must satisfy all of the following requirements. First, the prior art relied upon, coupled with the knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or to combine references. *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Second, the proposed modification must have had a reasonable expectation of success, as determined from the vantage point of one of ordinary skill in the art at the time the invention was made. *Amgen v. Chugai Pharmaceutical Co.* 18 USPQ 2d 1016, 1023 (Fed Cir. 1991), *cert. denied* 502 U.S. 856 (1991). Third, the prior art reference or combination of references must teach or suggest all of the limitations of the claims. *In re Wilson*, 165 USPQ 494, 496, (CCPA 1970). The Office Action did not establish a *prima facie* case of obviousness.

Applicants' invention, as encompassed by Claim 7 relates to a method that makes a refractory (valve metal) powder or a refractory (valve metal) oxide by a continuous reduction reaction. The method involves the combination of the following Mo-7303US

- 12 -

steps. The method (i) continuously provides a refractory or valve metal oxide as a continuous feed or segments of continuous feed; (ii) contacts the refractory or valve metal oxide feed with a reducing agent selected from the group consisting of magnesium, aluminum, and calcium, to create a static mixture or a dynamically formed mixture. Applicants' method then (iii) reduces the refractory or valve metal oxide feed in a reaction zone by heating the mixture in a reaction vessel that is a vertical tube furnace to create a highly exothermic self-sustaining reaction, in which the exothermic reaction can be triggered by heating the mixture to an ignition temperature or by adding a further reagent or catalyst. Applicants' method requires conditions that allow the reduction reaction to generate sufficient energy to propagate itself and (iv) recover "a high surface area powder substantially free of impurities."

One of ordinary skill in the art following the teachings of Gardner, Gohin, or Higgins would not have been motivated to modify the invention taught by the patent, practice Applicants' invention, and expect the results that Applicants have obtained.

With respect to Gardner for instance, Gardner does not teach a process that requires a self-sustaining exothermic reaction, as Applicants are claiming. Gardner's metallurgical process would have failed to suggest a method that continuously provides a refractory or valve metal oxide as a continuous feed or segments of continuous feed, and contacts the refractory or valve metal oxide feed with a reducing agent selected from the group consisting of magnesium, aluminum, and calcium, to create a static mixture or a dynamically formed mixture. Although Gardner teaches that its process may be practiced "continuously," Gardner fails to provide any meaningful details that disclose how a refractory or valve metal oxide can be continuously added. Gardner does not teach a method that requires the step of providing a refractory or valve metal oxide as a continuous feed or segments of continuous feed. Gardner does not teach a method that requires such a step as well as the other steps required by Applicants' invention. Gardner does not teach forming a blend of oxide feed with a reducing agent selected from magnesium, aluminum, and calcium before such a blend is heated under conditions that create a selfsustaining exothermic reaction. With such teachings and deficiencies Gardner would not have motivated one of ordinary skill in the art to modify Gardner, practice Applicants' invention, and expect the results Applicants' have obtained.

Similarly, with respect to Gohin, Gohin would have failed to provide suggestive details. Gohin is <u>fundamentally different</u> from Applicants' method. Gohin's dividing, embedding, and heating steps do not teach Applicants' method. Gohin does not teach a process that requires a self-sustaining exothermic reaction, as Applicants are claiming. Gohin does not teach a method that (i) continuously provides a refractory or valve metal oxide as a continuous feed or segments of continuous feed. Gohin does not suggest a method that also (ii) contacts the refractory or valve metal oxide feed with a reducing agent method then (iii) reduces the refractory or valve metal oxide feed in a reaction zone by heating the mixture in a reaction vessel to create a highly exothermic self-sustaining reaction, in which the exothermic reaction can be triggered by heating the mixture to an ignition temperature or by adding a further reagent or catalyst and (iv) recovers "a high surface area powder substantially free of impurities." Reconsideration is requested.

With respect to Higgins, Higgins also does not suggest Applicants' invention. Higgins' vanadium-aluminum master alloys having small amounts of refractory metals such a ruthenium (and their respective preparation processes) would not have motivated one of ordinary skill in the art following Higgins to practice Applicants' invention. Higgins does not teach a process that requires a self-sustaining exothermic reaction, as Applicants are claiming. Applicants' request that the U.S. PTO acknowledge the differences that exist between their invention and Higgins and withdraw the rejection. Reconsideration is requested.

2. Rejection of Claims 13 and 14 Under 35 USC 103

The Office Action rejected Claims 13 and 14 Under 35 USC 103 Over Gohin, Meyer, and Loffenholtz.

Applicants' invention, as encompassed by Claims 13-14, relates to a method that makes a refractory (valve metal) powder or a refractory (valve metal) oxide by a continuous reduction reaction. In embodiments encompassed by these claims, the powder can further contain agglomerates having a substantially uniform particle size distribution or agglomerates having a bimodal particle size distribution.

One of ordinary skill in the art following the teachings of Gohin, Meyer, or Loffenholtz would not have been motivated to modify any method taught by each of these documents, practice Applicants' invention and expect the results Applicants have obtained.

Goshen, Meyer, Loffelholz, and Gardner all are batch processes in which particles are in intimate contact with one another at elevated temperatures for periods of hours. None of these references would have suggested a method of producing a refractory metal powder, a valve metal powder, a refractory metal alloy powder, a valve metal alloy, a refractory metal suboxide powder, or a valve metal suboxide powder, as required by Applicants' process, by a continuous reduction reaction that provides a refractory or valve metal oxide as a continuous feed or segments of continuous feed. Neither of these references contain teachings that would have made one of ordinary skill in the art modify the methods taught in these documents, and practice a method that include the other steps required by Applicants' invention. Reconsideration is requested.

3. Rejection of Claim 16 Under 35 USC 103

The Office Action rejected Claim 16 Under 35 USC 103 over Gardner, Gohin, or Higgins. The rejection should be withdrawn in view of the remarks below.

Applicants' invention, encompassed by Claim 16, relates to a method that makes a refractory (valve metal) powder or a refractory (valve metal) oxide by a continuous reduction reaction. The method involves the combination of the following steps. The method (i) continuously provides a refractory or valve metal oxide as a continuous feed or segments of continuous feed; (ii) contacts the refractory or valve metal oxide feed with a reducing agent selected from the group consisting of magnesium, aluminum, and calcium, to create a static mixture or a dynamically formed mixture. The reducing agent in the mixture is provided in an amount substantially equal to the stoichiometric quantity required to react with said refractory or valve metal oxide feed. Applicants' method then (iii) reduces the refractory or valve metal oxide feed in a reaction zone by heating the mixture in a reaction vessel to create a highly exothermic self-sustaining reaction, in which the exothermic

reaction can be triggered by heating the mixture to an ignition temperature or by adding a further reagent or catalyst. Applicants' method requires conditions that allow the reduction reaction to generate sufficient energy to propagate itself and (iv) recover "a high surface area powder substantially free of impurities."

One of ordinary skill in the art following the teachings of Gardner, Gohin, or Higgins would not have been motivated to modify the process taught by each of these documents, practice Applicants' invention, and expect the results Applicants have obtained.

Gardner, for instance, fails to provide any meaningful details that disclose how a refractory or valve metal oxide can be continuously added. Gardner does not teach a method that requires the step of providing a refractory or valve metal oxide as a continuous feed or segments of continuous feed.

Gardner does not teach a method that requires such a step as well as the other steps required by Applicants' invention. Gardner does not teach forming a blend of oxide feed with a reducing agent selected from magnesium, aluminum, and calcium before such a blend is heated under conditions that create a self-sustaining exothermic reaction. With such teachings and deficiencies Gardner would not have motivated one of ordinary skill in the art to modify Gardner, practice Applicants' invention, and expect the results Applicants' have obtained. Reconsideration is requested.

Similarly, Gohin fails to suggest Applicants' invention. Gohin's dividing, embedding, and heating steps do not disclose Applicants' method. Gohin does not teach a method that (i) continuously provides a refractory or valve metal oxide as a continuous feed or segments of continuous feed. Gohin does not suggest a method that also (ii) contacts the refractory or valve metal oxide feed with a reducing agent method then (iii) reduces the refractory or valve metal oxide feed in a reaction zone by heating the mixture in a reaction vessel to create a highly exothermic self-sustaining reaction, in which the exothermic reaction can be triggered by heating the mixture to an ignition temperature or by adding a further reagent or catalyst and (iv) recovers "a high surface area powder substantially free of impurities."

Also, Higgins also fails to suggest Applicants' process. The teachings of Higgins does not teach a process that would create the conditions required by Applicants' process. For instance, Higgins does not teach a method that would produce the fine, pure materials required for high capacitance powders, as required by Applicants' process. In Column 4, for instance, Higgins' teaching that the reduction reaction reaches temperatures in excess of about 2400°C in no way suggest a method that recovers a high surface area powder substantially free of impurities. Higgins does not contain teachings that would have suggested a method containing the other steps of Applicants' method.

4. Rejection of Claims 17, 18, and 21-23 Under 35 USC 103

The Office Action rejected Claims 17-18 and 21-23 over Loffenholtz, U.S. Pat. No. 4,569,693 (Albrecht), U.S. Pat. No. 4,954,169 (Behrens), or U.S. Pat. No. 5,082,491 (Rerat).

Applicants' invention, as encompassed by Claims 17-18 and 21-23 relates to a method that makes a refractory (valve metal) powder or a refractory (valve metal) oxide by a continuous reduction reaction. The method involves the combination of the following steps. The method (i) continuously provides a refractory or valve metal oxide as a continuous feed or segments of continuous feed; (ii) contacts the refractory or valve metal oxide feed with a reducing agent selected from the group consisting of magnesium, aluminum, and calcium, to create a static mixture or a dynamically formed mixture. Applicants' method then (iii) reduces the refractory or valve metal oxide feed in a reaction zone by heating the mixture in a reaction vessel to create a highly exothermic self-sustaining reaction, in which the exothermic reaction can be triggered by heating the mixture to an ignition temperature or by adding a further reagent or catalyst. Applicants' method requires conditions that allow the reduction reaction to generate sufficient energy to propagate itself and (iv) recover "a high surface area powder substantially free of impurities." In the embodiments required by these claims, the method further comprises forming said powder into pellets at an appropriate sintering temperature or further comprises forming sintered pellets into electrolytic capacitors. In another embodiment, the recovering step (d) further comprises agglomerating and/or deoxidizing. In another

embodiment, Applicants' invention further comprises forming powder into pellets at an appropriate sintering temperature. And in another embodiment, Applicants' invention encompasses the step of forming sintered pellets into electrolytic capacitors.

One of ordinary skill in the art following the teachings of Loffenholtz,
Albrecht, Behrens, or Rerat would not have been motivated to modify the inventions
taught in these documents, practice Applicants' invention and expect the results
Applicants have obtained.

Neither of these references contain teachings that would have made one of ordinary skill in the art modify methods taught in these process, and practice Applicants' invention.

In view of the foregoing amendments and remarks, allowance of the pending claims is earnestly requested.

Respectfully submitted,

By

Diderico van

Attorney for Applicants

Reg. No. 38,641

Bayer Corporation
100 Bayer Road
Pittsburgh, Pennsylvania 15205-9741
(412) 777-8355
FACSIMILE PHONE NO.:
(412) 777-8363

s:/sr/van Eyl/dve0561